

REMARKS

This paper is responsive to non-final Office action dated July 3, 2003. Claims 1-39 were examined. Claims 1, 2, 4-7, 10-13, 21-25, and 30-39 stand rejected. Claims 3, 8, 9, 14-20, and 26-29 are objected to as being dependent upon rejected base claims.

Art Rejections Under 35 U.S.C. § 102

Claims 1, 2, 4-7, 10-12, 21-23, 30-33, and 35-39 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,141,329 to Turner.

Claim 1 has been amended to incorporate limitations of claim 2 and to incorporate limitations of claim 3, which was indicated as including allowable subject matter. Accordingly, Applicants respectfully request that the rejection of claim 1, and all claims dependent thereon be withdrawn.

Claims 2-4 have been cancelled.

Claim 5 has been put in independent form by incorporating limitations of claim 1 and amended to recite that

the predetermined criteria includes at least one selected from the set of a type of operation associated with the data information packet, security needs of the data information packet and reliability needs of the data information packet and wherein one of the first and second transmission channels is coupled to transmit control information relating to network protocol according to the predetermined criteria.

Applicants respectfully maintain that Turner fails to teach or suggest, and the Office Action fails to provide a reference that teaches or suggests, selecting data transmission packets for transmission on one of a first and second transmission channel according to a type of operation associated with a data information packet, security needs of the data information packet or

reliability needs of the data information packet. For at least this reason, Applicants believe amended claim 5 is allowable over Turner. Accordingly, Applicants respectfully request that the rejection of claim 5, and all claims dependent thereon be withdrawn.

Claim 6 has been amended to depend from claim 1.

Claim 8 has been amended to recite limitations of claims 1 and 5.

Regarding claim 10, Applicants disagree that it is inherent for the communication circuit of Turner to be a switched data network having at least one switch for each channel. While a teaching may be express or inherent, inherency is a stringent standard.

To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1268, 20 U.S.P.Q.2D (BNA) 1746, 1749 (Fed. Cir. 1991). "Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient." *Id.* at 1269, 20 U.S.P.Q.2D (BNA) at 1749 (quoting *In re Oelrich*, 666 F.2d 578, 581, 212 U.S.P.Q. 323, 326 (C.C.P.A. 1981)).

See *In re Robertson*, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999); MPEP § 2112.

Applicants disagree that it is inherent for the system of Turner to practice claim 10. For example, there is no teaching or suggestion that the communication circuit of Turner must be a switched data network having at least one switch for each channel. In contrast, Turner states that "[t]he real-time channel interface can be a telephone line interface operatively connected to a conventional circuit-switched telephone network and the best-efforts channel interface can be a network interface operatively connected to a global packet-based network." (Col. 1, lines 43-47) To be inherently a switched data network having at least one switch for each channel, those functions must by necessity be performed in Turner. They are not. Accordingly, Applicants respectfully request that the rejection of claim 10 be withdrawn.

Regarding claim 11, Applicants respectfully disagree that it is inherent for the communication circuit of Turner to include at least one of a sending node and a receiving node that includes a plurality of buffer descriptors identifying memory segments containing data. There is no teaching or suggestion that the communication circuit of Turner must include a sending node or a receiving node that includes a plurality of buffer descriptors identifying

memory segments containing data. To inherently include a plurality of buffer descriptors identifying memory segments containing data they must by necessity be included in Turner. They are not. Accordingly, Applicants respectfully request that the rejection of claim 11 be withdrawn.

Claim 13 has been amended to depend from claim 1.

Claim 21 has been amended to depend from claim 5.

Claim 22 has been amended to incorporate limitations of claim 25 and 26. Applicants respectfully maintain that Turner fails to teach or suggest that

the first and second transmission channels are  
respectively a high bandwidth channel and a low  
latency channel

as recited by amended claim 22. The Office Action states that Turner's best-efforts channel "is similar to the high bandwidth channel." Applicants respectfully disagree. Turner teaches that the best-efforts channel is a lower-bandwidth channel than the real-time channel (col. 2, lines 37-47) and that the best-efforts channel has a greater maximum latency than the real-time channel (col. 5, lines 17-22). The best-efforts channel is neither a low latency channel nor a high bandwidth channel. Thus, Turner fails to teach or suggest first and second transmission channels that are, respectively, a high bandwidth channel and a low latency channel, as recited by amended claim 22.

In addition, claim 22 has been amended to recite

scheduling transmittal of data traffic across the high  
bandwidth channel using control information  
transmitted over the low latency channel

This limitation was recited in claim 26, which Office Action indicated contained allowable subject matter.

For at least these reasons, Applicants believe amended claim 22 is allowable over Turner. Accordingly, Applicants respectfully request that the rejection of claim 22, and all claims dependent thereon be withdrawn.

Claim 25 has been amended in accordance with amendments to base claim 22 and to fix a typographical error.

Claim 26 has been cancelled.

Claim 30 has been put in independent form and amended to recite that

the predetermined criteria includes a security level of the data packet and wherein one of the first and second transmission channels is coupled to transmit control information relating to network protocol according to the predetermined criteria.

Applicants respectfully maintain that Turner fails to teach or suggest, and the Office Action fails to provide a reference that teaches or suggests that the predetermined criteria includes a security level of the data packet. For at least this reason, Applicants believe amended claim 30 is allowable over Turner. Accordingly, Applicants respectfully request that the rejection of claim 30, and all claims dependent thereon be withdrawn.

Regarding claim 32, Applicants respectfully disagree that it is inherent for the communication circuit of Turner to include at least one transmission channel associated with a plurality of lists of buffer descriptors, the lists of buffer descriptors related to a plurality of memory segments. There is no teaching or suggestion that the communication circuit of Turner must include at least one transmission channel associated with a plurality of lists of buffer descriptors, the lists of buffer descriptors related to a plurality of memory segments. To inherently include those elements, they must by necessity be included in Turner. They are not. Accordingly, Applicants respectfully request that the rejection of claim 32 be withdrawn.

Claim 33 has been amended to incorporate limitations of claims 34 and 35. Applicants respectfully maintain that Turner fails to teach or suggest

means for transmitting the data traffic using an independent transmission channel for the first and second group, means for transmitting the control information across one of the transmission channels, means for transmitting the first group of the data traffic having low latency characteristics, and means for transmitting the second group of the data traffic having high bandwidth characteristics

as recited by amended claim 33. The Office Action states that Turner's best-efforts channel handles high bandwidth traffic. Applicants respectfully disagree. Turner teaches that the best-efforts channel is a lower-bandwidth channel than the real-time channel (col. 2, lines 37-47) and that the best-efforts channel has a greater maximum latency than the real-time channel (col. 5, lines 17-22). The best-efforts channel is neither a low latency channel nor a high bandwidth channel. Thus, Turner fails to teach or suggest independent transmission channels for first and second groups having low latency characteristics and high bandwidth characteristics, respectively, as recited by amended claim 33. For at least this reason, Applicants believe amended claim 33 is allowable over Turner. Accordingly, Applicants respectfully request that the rejection of claim 33 be withdrawn.

Claims 34 and 35 have been cancelled.

Claim 36 has been amended to recite

wherein the two independent transmission channels include a low latency channel for transmitting data packets meeting a low latency criteria, and a high bandwidth channel for transmitting data packets meeting a high bandwidth criteria and wherein information relating to scheduling of the high bandwidth channel is transmitted over the low latency channel.

Applicants respectfully maintain that Turner fails to teach or suggest that information relating to scheduling of the high bandwidth channel is transmitted over the low latency channel, as recited by amended claim 36. For at least this reason, Applicants believe amended claim 36 is allowable over Turner. Accordingly, Applicants respectfully request that the rejection of claim 36, and all claims dependent thereon be withdrawn.

Regarding claim 37, Applicants respectfully disagree that it is inherent for the communication circuit of Turner to include code that writes the data into one of the two independent transmission channels by writing into a buffer associated therewith. There is no teaching or suggestion that the communication circuit of Turner must include code that writes the data into one of the two independent transmission channels by writing into a buffer associated therewith. To inherently include that code, it must by necessity be present in Turner. It is not. Accordingly, Applicants respectfully request that the rejection of claim 37 be withdrawn.

Claim 38 has been cancelled.

Art Rejections Under 35 U.S.C. § 103

Claim 13 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Turner in view of U.S. Patent No. 6,212,194 to Hsieh. Amended claim 13 depends from amended claim 1, a claim Applicants believe to be allowable over the art of record. Claim 13 is allowable for at least this reason. Accordingly, Applicants respectfully request that the rejection of claim 13 be withdrawn.


Claims 24 and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Turner in view of U.S. Patent No. 5,954,799 to Goheen et al. Claims 24 and 25 depend from claims that Applicants believe to be allowable over the art of record. Thus, claims 24 and 25 are allowable for at least this reason. Accordingly, Applicants respectfully request that the rejections of claim 24 and 25 be withdrawn.

Allowable Subject Matter


Applicants appreciate the indication of allowable subject matter for claims 3, 8, 9, 14-20, and 26-29. Claims 14 and 19 have been put in independent form. Claims 3 and 26 have been

cancelled. Claim 27 has been amended to depend from claim 25. Applicants respectfully maintain that claims 9, 15-18, 20, and 27-29 depend from allowable base claims. Accordingly, Applicants respectfully request that the objection to claims 8, 9, 14-20, and 27-29 be withdrawn.

In summary, claims 1, 5-25, 27-33, 36-37, and 39 are in the case. All claims are believed to be allowable over the art of record, and a Notice of Allowance to that effect is respectfully solicited. Nonetheless, if any issues remain that could be more efficiently handled by telephone, the Examiner is requested to call the undersigned at the number listed below.

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 Nicole Teitler Cave	10/3/03 Date

Respectfully submitted,

  
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